

# SPECIAL INSPECTION FORM and Special Inspection and Testing Agreement

# City of San Ramon Building & Safety Services 2226 Camino Ramon, San Ramon, CA 94523

2226 Camino Ramon, San Ramon, CA 94523 Office: (925) 973-2580 Fax (925) 242-9312

www.sanramon.ca.gov

<b>Applicant/Tenant Name:</b>	licant/Tenant Name: Permit Number:		er:	
Job Site Address:				
← Our preliminary review o special inspections are rec		ed at the address listed above ind	licates one or more	
Please read, complete, ma	ke a copy, and retur	rn completed packets to the Buil	ding Division	
☐ The code requirements fo	r Special Inspection	s are printed on the following pa	ges.	
Should you have any questions, please telephone the Building Division at (925) 973-2584 for assistance.				
ACKNOWLEDGEMENTS				
I have read and agree to comply with the following terms and conditions as listed on the "Special Inspection Testing Agreement"				
Owner/Owner's Agent:	Print		_	
	Signature:		Date:	
Contractor:	D		_	
	Signature:		Date:	
Special Inspector/Agency:			_	
			Date:	
Project Engineer/Architect:				
	g: 4		Date:	
□ Concrete       □ Reinforcing steel and pre-stressing steel		on & filling		

# "SPECIAL INSPECTION AND TESTING AGREEMENT" CITY OF SAN RAMON, CALIFORNIA BUILDING AND SAFETY SERVICES

To permit applicants of projects requiring special inspection and/or testing per Section 1701 of the 2001 California Building Code (CBC).

**BEFORE A PERMIT CAN BE ISSUED:** The owner, engineer, architect of record or owner's agent shall complete two (2) copies of this agreement. Including the attached structural tests and inspections schedule and the required acknowledgments. A pre-construction conference with all parties involved is required to review the special inspection requirements and procedures.

**APPROVAL OF SPECIAL INSPECTORS:** Each special inspector shall be approved by the building division prior to performing any duties. Each special inspector shall submit his/her qualifications to the building division and is subject to a personal interview for pre-qualification. Special inspectors shall display approved identification, as stipulated by the building division, when performing the function of special inspector.

Special inspection and testing shall meet the minimum requirements of C.B.C. Chapter 17, Section 1701.

#### The following conditions are also applicable:

# A. Duties and Responsibilities of the Special Inspector

- 1. Observation of work. The special inspector shall observe the work for conformance with the building division's reviewed (stamped) design drawings and specifications and applicable workmanship provisions of the C.B.C. Architect/Engineer reviewed shop drawings and/or placing drawing may be used only as an aid to inspection.

  Special inspections are to be performed on a continuous basis, meaning that the special inspector is on site in the general area at
- all times observing the work required by special inspection. Periodic inspections, if any, must have prior approval by the building department based on a separate written plan reviewed and approved by the building department and the project engineer or architect.
- **2. Reporting nonconforming items.** The special inspector shall bring nonconforming items to the immediate attention of the contractor and note all such items in the daily report. If any item is not resolved in a timely manor or is about to be incorporated in the work, the special inspector shall immediately notify the building division by telephone or in person, notify the engineer or architect, and post a discrepancy notice.
- **3. Furnish daily reports.** Each special inspector shall complete and sign both the special inspection record and the daily report form for each day's inspections to remain at the jobsite with the contractor for review by the building division's inspector.
- **4. Furnish weekly reports.** The special inspector or inspection agency shall furnish weekly reports of tests and inspections directly to the building division, project engineer, or architect, and others as designated. These reports must include the following:
- Description of daily inspections and tests made with applicable locations;
- Listing of all nonconforming items:
- Reports on how nonconforming items were resolved or unresolved as applicable; and
- Itemized changes authorized by the architect, engineer, or building division if not included in the nonconforming items.
- **5. Furnish final report** The special inspector or inspection agency shall submit a final signed report to the building division stating that all items requiring special inspection and testing were fulfilled and reported and, to the best of his/her knowledge, in conformance with the reviewed design drawings, specifications, approved change orders and the applicable workmanship provisions of the C.B.C. Items not in inspection coverage (i.e. missed inspections, periodic inspections when continuous was required, etc.) shall be specifically itemized in this report.

## B. Contractor Responsibilities

- 1. Notify the special inspector. The contractor is responsible for notifying the special inspector or agency regarding individual inspections for items on the attached schedule and as noted on the building division reviewed plan. Adequate notice shall be provided so that the special inspector has time to become familiar with the project.
- 2. Provide access to the approved plans. The contractor is responsible for providing the special inspector access to the reviewed plans at the jobsite.

**3. Retain special inspection records.** The contractor is also responsible for retaining, at the jobsite, all special inspection records submitted by the special inspector, and providing these records for review by the building division's inspector upon request.

### C. Building Division Responsibilities

- 1. Approve special inspection. The building division shall approve all special inspectors and special inspection requirements.
- **2. Monitor special inspection.** Work requiring special inspection and the performance of special inspectors, shall be monitored by the building division's inspector. His/her approval must be obtained prior to placement of concrete or other similar activities in addition to that of the special inspector.
- **3. Issue Certificate of Occupancy.** The building division shall issue a Certificate of Occupancy after all special inspection reports and the final report has been submitted and the building final inspection is accepted.

# **Special Inspection**

The following is the revised Chapter 17, Section 1701, Special Inspections, as it appears in the 2001 Edition of the California Building Code.

**1701.1** <u>General</u>. In addition to the inspections required by Section 108, the owner or the engineer or architect of record acting as the owner's agent shall employ one or more special inspectors who shall provide inspections during construction on the types of work listed under Section 1701.5.

**EXCEPTION:** The building official may waive the requirement for the employment of a special inspector if the construction is of a minor nature.

- **1701.2** <u>Special Inspector</u>. The special inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the building official, for inspection of the particular type of construction or operation requiring special inspection.
- **1701.3** <u>Duties and Responsibilities of the Special Inspector</u>. The special inspector shall observe the work assigned for conformance to the approved design drawings and specifications.

The special inspector shall furnish inspection reports to the building official, the engineer or architect of record, and other designated persons. All discrepancies shall be brought to the immediate attention of the contractor for correction, then, if uncorrected, to the proper design authority and to the building official.

The special inspector shall submit a final signed report stating whether the work requiring special inspection was, to the best of the inspector's knowledge, in conformance to the approved plans and specifications and the applicable workmanship provisions of this code.

- **1701.4** <u>Standards of Quality</u>. The standards listed below labeled a "UBC Standard" are also listed in Chapter 35, Part II, and are part of this code. The other standards listed below are recognized standards. (See Sections 3503 and 3504.)
  - 1. **Concrete**. ASTM C 94, Ready-mixed Concrete
  - 2. <u>Connections</u>. Specification for Structural Joints Using ASTM A 325 or A 490 Bolts-Load and Resistance Factor Design, Research Council of Structural Connections, Section 1701.5, Item 6.
    - Specification for Structural Joints Using ASTM A 325 or A 490 Bolts-Allowable Stress Design, Research Council of Structural Connections, Section 1701.5, Item 6.
  - 3. **Spray-applied Fire-resistive Materials**. UBC Standard 7-6, Thickness and Density Determination for Spray-applied Fire-resistive Materials

**1701.5 Types of Work**. Except as provided in Section 1701.1, the types of work listed below shall be inspected by a special inspector.

1. Concrete. During the taking of test specimens and placing of reinforced concrete. See Item 12 for shotcrete.

- **EXCEPTIONS:** 1. Concrete for foundations conforming to mini- mum requirements of Table 18-I-C or for Group R, Division 3 or Group U. Division I Occupancies provided the building official finds that a special hazard does not exist.
- 2. For foundation concrete, other than cast-in-place drilled piles or caissons, where the structural design is based on an *I*;' no greater than 2,500 pounds per square inch (psi) (17.2 MPa).
- 3. Nonstructural slabs on grade, including prestressed slabs on grade when effective prestress in concrete is less than 150 psi (1.03 MPa).
- 4. Site work concrete fully supported on earth and concrete where no special hazard exists.
- 2. <u>Bolts installed in concrete</u>. Prior to and during the placement of concrete around bolts when stress increases permitted by Footnote 5 of Table 19-D or Section 1923 are utilized
- 3. <u>Special moment-resisting concrete frame</u>. For moment frames resisting design seismic load in structures within Seismic Zones 3 and 4, the special inspector shall provide reports to the person responsible for the structural design and shall provide continuous inspection of the placement of the reinforcement and concrete.
- 4. Reinforcing steel and prestressing steel tendons.
  - 4.1 During all stressing and grouting of tendons in prestressed concrete.
  - 4.2 During placing of reinforcing steel and prestressing tendons for all concrete required to have special inspection by Item 1.

**EXCEPTION:** The special inspector need not be present continuously during placing of reinforcing steel and prestressing tendons, provided the special inspector has inspected for conformance to the approved plans prior to the closing of forms or the delivery of concrete to the jobsite.

# 5. Structural welding.

5.1 General. During the welding of any member or connection that is designed to resist loads and forces required by this code.

**EXCEPTIONS: 1.** Welding done in an approved fabricator's shop in accordance with Section 1701.7.

- 2. The special inspector need not be continuously present during welding of the following items, provided the materials, qualifications of welding procedures and welders are verified prior to the start of work; periodic inspections are made of work in progress; and a visual inspection of all welds is made prior to completion or prior to shipment of shop welding:
  - 2.1 Single-pass fillet welds not exceeding 5/16 inch (7.9 mm) in size
  - **2.2** Floor and roof deck welding.
  - **2.3** Welded studs when used for structural diaphragm or composite systems.
  - **2.4** Welded sheet steel for cold-formed steel framing members such as studs and joists.
  - **2.5** Welding of stairs and railing systems.
- 5.2 Special moment-resisting steel frames. During the welding of special moment-resisting steel frames. In addition to Item 5.1 requirements, nondestructive testing as required by Section 1703 of this code.
- 5.3 Welding of reinforcing steel. During the welding of reinforcing steel.

**EXCEPTION:** The special inspector need not be continuously present during the welding of ASTM A 706 reinforcing steel not larger than No.5 bars used for embedments, provided the materials, qualifications of welding procedures and welders are verified prior to the start of work: periodic inspections are made of work in progress: and a visual inspection of all welds is made prior to completion or prior to shipment of shop welding.

6. **High-strength bolting.** The inspection of high-strength A 325 and A 490 bolts shall be in accordance with approved nationally recognized standards and the requirements of this section.

While the work is in progress, the special inspector shall determine that the requirements for bolts, nuts, washers and paint; bolted parts; and installation and tightening in such standards are met. Such inspections may be performed on a periodic basis in accordance with the requirements of Section 1701.6. The special inspector shall observe the calibration procedures when such procedures are required by the plans or specifications and shall monitor the installation of bolts to determine that all plies of connected materials have been drawn together and that the selected procedure is properly used to tighten all bolts.

# 7. Structural masonry

7.1 For masonry, other than fully grouted open-end hollow- unit masonry, during preparation and taking of any required prisms or test specimens, placing of all masonry units, placement of reinforcement, inspection of grout space, immediately prior to closing of clean- outs, and during all grouting operations.

**EXCEPTION:** For hollow-unit masonry where the f'm is no more than 1.500 psi (10.34 MPa) for concrete units or 2.600 psi (17.93 MPa) for clay units, special inspection may be performed as required for fully grouted open-end hollow-unit masonry specified in Item 7.2.

7.2 For fully grouted open-end hollow-unit masonry during preparation and taking of any required prisms or test specimens, at the start of laying units, after the placement of reinforcing steel, grout space prior to each grouting operation, and during all grouting operations.

**EXCEPTION:** Special inspection as required in Items 7.1 and 7.2 need not be provided when design stresses have been adjusted as specified in Chapter 21 to permit noncontiguous inspection.

- 8. Reinforced gypsum concrete. When cast-in-place Class B gypsum concrete is being mixed and placed.
- 9. <u>Insulating concrete fill.</u> During the application of insulating concrete fill when used as part of a structural system.

**EXCEPTION:** The special inspections may be limited to an initial inspection to check the deck surface and placement of reinforcing. The special inspector shall supervise the preparation of compression test specimens during this initial inspection.

- 10. **Spray-applied fire-resistive materials**. As required by UBC Standard 7-6.
- 11. <u>Piling, drilled piers and caissons</u>. During driving and testing of piles and construction of cast-in-place drilled piles or caissons. See Items 1 and 4 for concrete and reinforcing steel inspection.
- 12. Shotcrete. During the taking of test specimens and placing of all shotcrete and as required by Sections 1924.10 and 1924.11

**EXCEPTION:** Shotcrete work fully supported on earth, minor repairs and when, in the opinion of the building official, no special hazard exists.

13. <u>Special grading, excavation and filling</u>. During earthwork excavations, grading and filling operations inspection to satisfy requirements of Chapter 18 and Appendix Chapter 33.

#### 14. Smoke-control system.

- 14.1 During erection of ductwork and prior to concealment for the purposes of leakage testing and recording of device location.
- 14.2 Prior to occupancy and after sufficient completion for the purposes of pressure difference testing, flow measurements and detection and control verification.
- 15. **Special cases.** Work that, in the opinion of the building official, involves unusual hazards or conditions.

#### 1701.6 Continuous and Periodic Special Inspection.

- **1701.6.1** Continuous special inspection. Continuous special inspection means that the special inspector is on the site at all times observing the work requiring special inspection.
- **1701.6.2** <u>Periodic special inspection</u>. Some inspections may be made on a periodic basis and satisfy the requirements of continuous inspection, provided this periodic scheduled inspection is per- formed as outlined in the project plans and specifications and approved by the building official.

# <u>CITY OF SAN RAMON</u> <u>SPECIAL INSPECTIORS' DAILY REPORT</u>

Project Name:		Permit No:		
Project Address:				
Inspector's Name:				
Inspection type(s):	□ Continuous	□ Periodic		
Describe inspection n	nade, include locations:			
List test made:				
List items requiring correction, corrections of previously listed items, and previously listed uncorrected items:				
List changes to approved plans authorized by Architect or Engineer.				
Comments:				
approved design dra		ed was in accordance with Building Division and applicable workmanship provisions of the ex.		
Signed:		Date:		